

S/N Unknown

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Kenneth W. Marr et al. Examiner: Unknown
Serial No.: Unknown Group Art Unit: Unknown
Filed: Herewith Docket: 303.819US2
Title: CIRCUITS AND METHODS TO PROTECT A GATE DIELECTRIC ANTIFUSE

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with 37 C.F.R. §§ 1.97 *et. seq.*, the enclosed materials are brought to the attention of the Examiner for consideration in connection with the above-identified patent application. Applicants respectfully request that this Information Disclosure Statement be entered and the documents listed on the attached Form 1449 be considered by the Examiner and made of record. Pursuant to the provisions of MPEP 609, Applicants request that a copy of the 1449 form, initialed as being considered by the Examiner, be returned to the Applicants with the next official communication.

Pursuant to 37 C.F.R. §1.97(b), it is believed that no fee or statement is required with the Information Disclosure Statement. However, if an Office Action on the merits has been mailed, the Commissioner is hereby authorized to charge the required fees to Deposit Account No. 19-0743 in order to have this Information Disclosure Statement considered.

Pursuant to 37 C.F.R. §1.98(d), copies of the listed documents are not provided as these references were previously cited by or submitted to the U.S. Patent Office in connection with Applicants' prior U.S. application, Serial No. 10/231756, filed on August 29, 2002, which is relied upon for an earlier filing date under 35 U.S.C. §120.

INFORMATION DISCLOSURE STATEMENT

Serial No :Unknown

Filing Date: Herewith

Title: CIRCUITS AND METHODS TO PROTECT A GATE DIELECTRIC ANTIFUSE

Page 2
Dkt: 303.819US2

The Examiner is invited to contact the Applicants' Representative at the below-listed telephone number if there are any questions regarding this communication.

Respectfully submitted,

KENNETH W. MARR ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. Box 2938
Minneapolis, MN 55402
(612) 349-9587

Date

3 Feb '04

By


Timothy B Chise
Reg. No 40,957

"Express Mail" mailing label number: EV332567705US

Date of Deposit: February 3, 2004

This paper or fee is being deposited on the date indicated above with the United States Postal Service pursuant to 37 CFR 1.10, and is addressed to The Commissioner for Patents, Mail Stop Patent Application, P.O. Box 1450, Alexandria, VA 22313-1450.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		Complete if Known Application Number Unknown Filing Date Even Date Herewith First Named Inventor Marr, Kenneth Group Art Unit Unknown Examiner Name Unknown				
Sheet 1 of 3		Attorney Docket No: 303.819US2				

US PATENT DOCUMENTS

Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	Filing Date If Appropriate
	US-2001/0051407	12/13/2001	Tran, Luan C.	438	241	09/01/1999
	US-2001/0054740	12/27/2001	Marr, Ken W.	257	360	08/20/2001
	US-4,748,490	05/31/1988	Hollingsworth, Deems R.	357	51	04/13/1988
	US-5,110,754	05/05/1992	Lowrey, Tyler A., et al.	437	52	10/04/1991
	US-5,194,759	03/16/1993	El-Ayat, Khaled A., et al.	307	202.1	02/13/1992
	US-5,299,150	03/29/1994	Galbraith, Douglas C., et al.	365	94	01/10/1989
	US-5,376,566	12/27/1994	Gonzales, Fernando	437	35	11/12/1993
	US-5,379,250	01/03/1995	Harshfield, Steven	365	105	08/20/1993
	US-5,439,835	08/08/1995	Gonzales, Fernando	437	35	10/14/1994
	US-5,646,879	07/08/1997	Harshfield, Steven	365	105	12/01/1994
	US-5,661,045	08/26/1997	Manning, Monte , et al.	438	286	12/09/1996
	US-5,714,786	02/03/1998	Gonzales, Fernando , et al.	257	366	10/31/1996
	US-5,724,282	03/03/1998	Loughmiller, D. , et al.	365	96	09/06/1996
	US-5,741,720	04/21/1998	Hawley, Frank W., et al.	437	60	10/04/1995
	US-5,742,555	04/21/1998	Marr, K. W., et al.	365	225.7	08/20/1996
	US-5,789,796	08/04/1998	Kang, S. , et al.	257	530	08/25/1997
	US-5,811,869	09/22/1998	Seyyedy, M. , et al.	257	530	01/04/1996
	US-5,838,620	11/17/1998	Zagar, P. , et al.	365	200	02/06/1997
	US-5,859,543	01/12/1999	Kolze, Paige A.	326	41	09/17/1997
	US-5,978,248	11/02/1999	Marr, K. W., et al.	365	96	02/25/1998
	US-5,998,274	12/07/1999	Akram, S. , et al.	438	306	10/14/1998
	US-6,005,273	12/21/1999	Gonzales, Fernando , et al.	257	366	12/10/1997
	US-6,041,008	03/01/2000	Marr, K.	365	225.7	05/13/1998
	US-6,088,282	07/11/2000	Loughmiller, Daniel R., et al.	365	225.7	07/26/1999
	US-6,090,693	07/18/2000	Gonzales, Fernando , et al.	438	592	08/16/1999
	US-6,194,756	02/27/2001	Gonzales, Fernando	257	305	01/21/1997
	US-6,233,194	05/15/2001	Marr, K. , et al.	365	225.7	04/27/2000

EXAMINER

DATE CONSIDERED

INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		<i>Complete if Known</i>				
		Application Number		Unknown		
		Filing Date		Even Date Herewith		
		First Named Inventor		Marr, Kenneth		
		Group Art Unit		Unknown		
		Examiner Name		Unknown		
Sheet 2 of 3		Attorney Docket No: 303.819US2				

	US-6,252,293	06/26/2001	Seyyedy, Mirmajid , et al.	257	530	07/02/1998
	US-6,252,422	06/01/2001	Patel, Rakesh H., et al.	326	80	09/22/1999
	US-6,271,071	08/07/2001	Gonzales, Fernando	438	238	04/06/1998
	US-6,285,062	09/04/2001	Marr, K.	257	361	05/12/1999
	US-6,300,188	10/09/2001	Gonzales, Fernando	438	239	06/16/1999
	US-6,384,666	05/07/2002	Bertin, Claude L., et al.	327	525	03/23/2001
	US-6,448,603	09/10/2002	Gonzales, Fernando	257	306	12/13/2000
	US-6,456,149	09/24/2002	Cutter, Douglas J., et al.	327	525	02/27/2001
	US-6,515,931	02/04/2003	Marr, Kenneth W., et al.	365	225.7	04/30/2001
	US-6,545,928	04/08/2003	Bell, D. M.	365	225.7	09/25/2001
	US-6,570,805	05/27/2003	McCollum, John	365	225.7	12/20/2000
	US-6,630,724	10/07/2003	Marr, Kenneth W.	257	530	08/31/2000

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Foreign Document No	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	T ²
--------------------	---------------------	------------------	---	-------	----------	----------------

OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		CANDELIER, P. , et al., "One Time Programmable Drift Antifuse Cell Reliability", <u>IEEE International Reliability Physics Symposium Proceedings</u> , San Jose, Ca,(2000),pp. 169-173	
		DABRAL, S. , et al., <u>Basic ESD and I/O design</u> , John Wiley & Sons, Inc, New York,(1998),pp. 260-263	
		DABRAL, SANJAY , et al., <u>Basic ESD and I/O Design</u> , (1998),pp. 272	
		DE GRAAF, C. , et al., "A Novel High-Density Low-Cost Diode Programmable Read Only Memory", <u>IEDM Technical Digest</u> , San Francisco, Ca,(1996),pp. 189-192	
		DOBBERPUHL, D. W., et al., "A 200-MHz 64-b Dual-Issue CMOS Microprocessor", <u>IEEE Journal of Solid-State Circuits</u> , 27(11), (1992),pp. 1555-1567	
		HAMDY, E. , et al., "Dielectric based antifuse for logic and memory ICs", <u>IEDM</u> , San Francisco, Ca,(1988),pp . 786-789	
		HOWER, P. L., et al., "Snapback and Safe Operating Area of Ldmos Transistors", <u>IEDM</u> , (1999),pp. 193-196	
		KALNITSKY, A. , et al., "CoSi2 integrated fuses on poly silicon for low voltage 0.18 micrometer CMOS applications", <u>IEDM</u> , (1999),pp. 765-768	

EXAMINER

DATE CONSIDERED

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		<i>Complete if Known</i>	
		Application Number	Unknown
		Filing Date	Even Date Herewith
		First Named Inventor	Marr, Kenneth
		Group Art Unit	Unknown
		Examiner Name	Unknown
Sheet 3 of 3		Attorney Docket No: 303.819US2	

		LEE, H. , et al., "THPM 13.4: An Experimental 1 Mb CMOS SRAM with Configurable Organization and Operation", <u>IEEE International Solid-State Circuits Conference</u> , (1988),pp. 180-181, 359	
		LUDIKHUIZE, A. W., et al., "Analysis of hot-carrier-induced degradation and snapback in submicron 50V lateral MOS transistors", <u>IEEE</u> , (1997),pp. 53-56	
		SCHRODER, H U., et al., "High Voltage resistant ESD protection circuitry of 0.5um CMOS OTP/EPROM programming pin", <u>EOS/ESD Symposium</u> , (1998),pp. 2A.6.1-2A.6.8	
		VOLDMAN, S. H., "ESD Protection in a Mixed Voltage Interface and Multi-Rail Diconnected Power Grid Environment in 0.50- and 0.25- micrometer Channel Length CMOS Technologies", <u>EOS/ ESD Symposium</u> , (1994),pp. 125-134	

EXAMINER

DATE CONSIDERED